

# **COLLABORATIVE DEVELOPMENT OF A COMPUTER-BASED PATIENT RECORD WITH A COMMERCIAL VENDOR**

## **Progress Report at Two Years**

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Organizations face a difficult choice when choosing to employ a Computer-based Patient Record (CPR). Standards for the CPR are evolving despite the impetus created by the Institute of Medicine study in 1991. Furthermore, evaluations of existing systems suggest that all commercial offerings fall short of the mark. Local development is costly and onerous; integration of a multitude of existing departmental systems is fraught with confusion; and use of data repositories depends upon the quality of existing data while often failing to provide the administrative systems that are critical to CPR function.

Culminating a three year decision process, in 1993 the University of Nebraska Medical Center (UNMC) signed a contract with PHAMIS Inc of Seattle Washington to co-develop a CPR. UNMC implemented the first PHAMIS software module in 1995 and has now completed collaborative design and implementation of newly developed ambulatory and medical records software. This implementation employs a single central data base with integrated enterprise-wide administrative, financial and clinical support. The application employs relational data structures, is client-server in design, and uses network workstations to link the clinician to the CPR and campus knowledge tools.

This demonstration will summarize the collaborative process and give the participant a first-hand look at the results of this project. The goals of the demonstration will include:

- 1) To briefly summarize the nature of the search process, contract choices and to review the cooperative process of software development and implementation
- 2) To briefly review the vision and elements of an integrated, enterprise-wide CPR, emphasizing components of both inpatient and outpatient clinical data management
- 3) To recount the data and interchange standards employed in data base design and implementation
- 4) To demonstrate the appearance and function of major CPR elements:
  - structured codified problem list
  - medication and allergy summaries
  - laboratory, radiology and ancillary results
  - document management and retrieval
  - physical findings and historical data
- 5) To review and demonstrate the organization and browsing features of the CPR:
  - longitudinal (spreadsheet) views
  - integrated clinical management 'snapshots'
  - data management in the intensive care setting
- 6) To demonstrate the clinical workstation as an integrating point between the CPR and enterprise knowledge sources and data bases distributed via the campus 'intra-net'
- 7) To frankly discuss the strengths and weaknesses of this approach to CPR development
- 8) To summarize further developmental work underway between UNMC and PHAMIS:
  - encounter-based view
  - overall plan of care
  - panorama of the episode of care
  - referral management and integration of managed care into the clinical process